Amendments to the Claims:

What is claimed is:

1. (Previously Presented) A power converter, comprising:

an input voltage source;

an output current independent of an output voltage, wherein the output voltage is unconstrained by an input voltage from the input voltage source and the power converter operates in all four voltage current quadrants; and

a switching arrangement enabling an output terminal to be in common with an input terminal.

2. (Original) The power converter of claim 1, wherein the power converter further comprises a single inductor with two windings.

3. (Original) The power converter of claim 2, wherein the windings of the single inductor are tightly coupled magnetically.

4. (Original) The power converter of claim 2, wherein the switching arrangement comprises a plurality of bidirectional switches coupled to the single inductor, wherein the plurality of bidirectional switches are controlled by a pulse modulator.

5. (Original) The power converter of claim 4, wherein the plurality of bi-directional switches comprises a first switch coupled to a first terminal of the single inductor and to a positive terminal of the input voltage source, a second switch coupled to another terminal of the single inductor and to the positive terminal of the input voltage source, and a third switch coupled the first terminal of the single inductor and to the output terminal.

6. (Original) The power converter of claim 5, wherein the power converter further comprises a capacitor coupled between the output terminal and a negative terminal of input voltage source, wherein the capacitor filters a pulsating output current that flows when the third switch is turned on.

7. (Original) The power converter of claim 5, wherein the pulse modulator controls the plurality of switches such that the third switch is on when neither the first switch nor second switch is on and such that the first switch and the second switch cannot be on at the same time.

8. (Original) The power converter of claim 5, wherein the plurality of switches operate in a cyclical sequence and at a constant frequency.

9. (Original) The power converter of claim 8, wherein the on-time of the third switch is constant and less than a period of the cyclical sequence.

10. (Original) The power converter of claim 5, wherein the closure of the first switch causes current flow into a reference phase inductor terminal to increase while the second switch causes current flow into a second reference phase inductor terminal to decrease such that a greater on-time among the first switch and the second switch determines the polarity of the output voltage.

11. (Original) The power converter of claim 1, wherein the power converter can operate as at least one among the group comprising a buck-boost converter, an AC-to-DC converter, and an amplifier.

12. (Previously Presented) The power converter of claim 1, wherein the power converter further comprises a single inductor with at least one winding and wherein the switching arrangement enables the output terminal to be selectively in common with the input terminal.

13. (Original) The power converter of claim 1, wherein the power converter further comprises a single inductor having a single winding and wherein the switching arrangement comprises a plurality of bidirectional switch pairs coupled to the single inductor.

14. (Previously Presented) A power converter, comprising:

an inductor having at least two windings wherein at least one set of respective common terminals of the windings are in opposite phase;

an input voltage source selectively coupled to the inductor and to an output terminal of the power converter such that an output current remains independent of an output voltage and the output voltage is unconstrained by an input voltage from the input voltage source; and

wherein the power converter operates in all four voltage current quadrants.

15. (Original) The power converter of claim 14, wherein the input voltage source is selectively coupled to the transformer using a plurality of bidirectional switches coupled to the transformer, wherein the plurality of bidirectional switches are controlled by a pulse modulator.

16. (Original) The power converter of claim 15, wherein the plurality of bi-directional switches comprises a first switch coupled to a first terminal of the transformer and to a positive terminal of the input voltage source, a second switch coupled to another terminal of the transformer and to the positive terminal of the input voltage source, and a third switch coupled the first terminal of the transformer and to the output terminal.

17. (Original) The power converter of claim 16, wherein the power converter further comprises a capacitor coupled between the output terminal and a negative terminal of input voltage source, wherein the capacitor filters a pulsating output current that flows when the third switch is turned on.

18. (Currently Amended) A method of power conversion, comprising the steps of:

selectively converting an input signal to an output signal operating in ~~any one of~~ four voltage-current quadrants; and

selectively coupling at least one output terminal with an input terminal, wherein an output current is independent of an output voltage and the output voltage is unconstrained by an input voltage of the input signal.

19. (Original) The method of power conversion of claim 18, wherein the step of selectively converting the input signal to the output signal comprises switching a plurality of bidirectional switches controlled by a pulse modulator.

20. (Original) The method of power conversion of claim 18, wherein the step of selectively coupling the at least one output terminal with the input terminal comprises switching a bidirectional switch among a plurality of switches that operate in a cyclical sequence such that an on-time of the bidirectional switch is a constant amount of time during a period of the cyclical sequence.